



YAMAHA
Digital Home Theater
AMPLIFIERS
RECEIVERS

DVD PLAYER / TUNER / SUBWOOFERS / SPEAKER SYSTEMS



Yamaha invites you into a new world of entertainment.

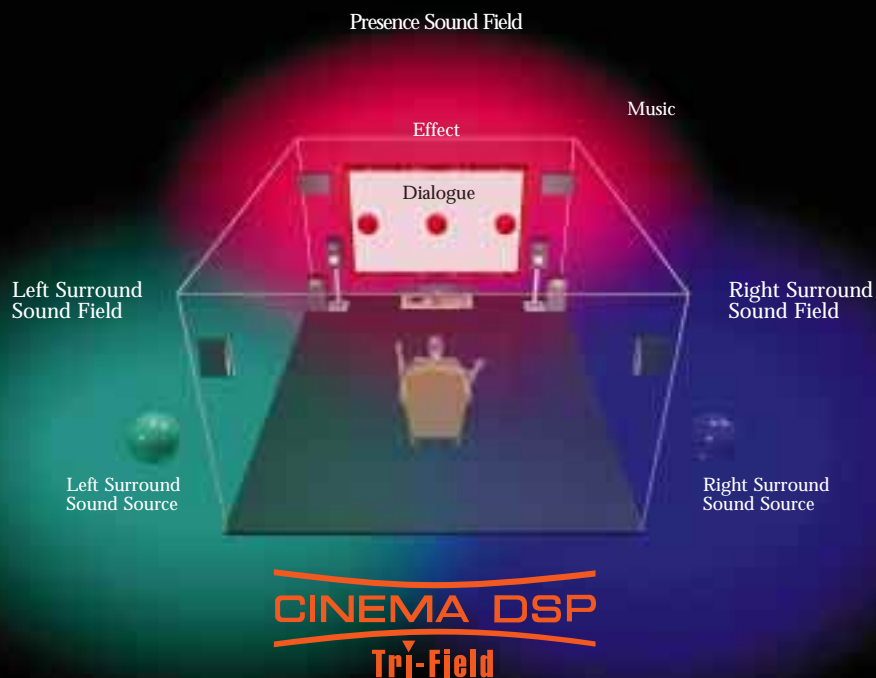
Many people watch movies at home with a TV and VCR or other video player; but are frustrated by the dull and lifeless sound. Let's face it: when you're used to hearing the dynamic sound offered in today's movie theaters, the sound from your TV speakers pales by comparison. Even outputting the sound from an ordinary audio system (amp and two speakers) improves little but the volume. If this is your situation, Yamaha has good news: CINEMA DSP. Featured in Yamaha Digital Home Theater Amplifiers and Receivers, this amazing technology makes the sound from movies (and music, too) much more thrillingly realistic than anything you've ever heard from a home system. Discover the full possibilities of home cinema entertainment – with Yamaha CINEMA DSP components.



CINEMA DSP

Yamaha's Total Commitment to Excellence Creates the Ultimate in Home Entertainment.

Digital Sound Field Processing (DSP) is a Yamaha innovation that has opened a new chapter in the history of audio. Instead of having to go to a movie theater or concert hall to experience awesome, all-enveloping acoustics, you can now stay home and hear the same or even better sound. Our latest generation of amplifiers with CINEMA DSP technology offer capabilities and quality that will truly astound you. While you're watching a movie, CINEMA DSP gives you precisely the aural experience that the sound director intended you to have. The sound is an actual presence, intensifying the suspense, action or drama being portrayed on the screen. When you're enjoying a music video or audio program, you have the uncanny sensation of actually sitting in a concert hall, jazz club, and so on. This is an entirely new listening experience—one that only Yamaha can bring you.



Sound Field Imaging of Tri-Field CINEMA DSP

CINEMA DSP

Overcoming the Differences Between Movie Theaters and Home Theaters: How Yamaha's Cinema DSP Does It.

The use of Dolby Surround enables audio decoding in a home theater according to the same principle as in a movie theater. But a home media room is, of course, far smaller than a



MOVIE THEATER

movie theater, where the audience is surrounded by arrays of multiple speakers. Yet amazingly, Yamaha Cinema DSP is able to compensate for the differences in facilities, acoustics, dimensions and other conditions between movie theaters and a home listening room, enabling the viewer to enjoy sound that gives the sensation of being as expansive as in a theater. That's what creating a home theater is all about.

Not Just Great Music Performances, but On-Location Sound

Back in 1986, Yamaha engineers developed a way to make precise acoustic "maps" of some of the world's most famous performance venues. Using special single-point quad microphones to measure acoustic data, they created formulas, digitally programmed into LSI chips, which made it possible to reproduce these actual "sound fields" under identical conditions. Yamaha named its new technology HiFi DSP (for Digital Sound Field Processing). Its DSP-1 Digital Processor won acclaim



HOME THEATER

DSP-A1000, an integrated amplifier with the most advanced DSP technology yet, called Cinema DSP. Through the use of Dolby Pro Logic and Digital Sound Field Processing LSIs, this new technology achieved what was long believed impossible: an enveloping surround sound that brought the ambiance of a movie theater to an ordinary listening room to create a home theater with spectacular audio ambiance. In 1993, Yamaha further refined this formula with the DSP-A2070—an integrated amplifier equipped with an all-digital version of Dolby Pro Logic.



The Superior Sound of Tri-Field CINEMA DSP

as the world's first sound field processor with the ability to store digital data on the acoustic conditions of concert halls, cathedrals and other environments and reproduce these conditions in ordinary listening rooms.

CINEMA DSP

CINEMA DSP: Theater-Quality Sound at Home

But Yamaha engineers were already looking ahead to the next challenge. The introduction of Dolby Surround Pro Logic in 1987 gave home users the means of enjoying the same exciting effects of the Dolby Stereo used in large movie theaters from their home theater systems. This system, Dolby Pro Logic, is designed to project dialogue straight from the front, while music and sound effects come from the back and sides, to create highly dramatic and realistic effects. Merging the new Dolby technology with Yamaha HiFi DSP, Yamaha once again astonished the industry with the

CINEMA DSP Tri-Field

Enter the Ultimate: Tri-Field CINEMA DSP

The newest advances in movie sound reproduction for the home, Dolby Digital and DTS Digital Surround, use discrete channels to provide an expanded sense of depth, localization and realism. To upgrade DSP technology for use with these systems, Yamaha engineers conducted new tests in the same dubbing theaters used in the making of movie soundtracks and developed an improved processing technology called Tri-Field CINEMA DSP. Instead of one or two, it creates three separate sound fields (Presence, Left and Right), each produced from their own specific sound field data. This results in sound with highly accurate localization, smooth movement, exceptional clarity and richness, and startlingly realistic presence. Only Yamaha is capable of providing a sound experience with this degree of sophistication.

DSP-A1: A Tour de Force in Audio/Aco



DSP-A1 Digital Home Theater Amplifier



The DSP-A1 delivers nothing less than the world's finest home theater audio performance. In every single respect, it is absolutely state-of-the-art. Never before have you been able to select so many different sound fields to match audio and video genres. Never before have you been able to experience such thrilling audio "presence" in your own home. Through the wonders of Dolby Digital and DTS Digital Surround, together with Yamaha's own leading-edge Digital Sound Field Processing technology, you will enter a new realm of home entertainment.



High-density main circuit board with daughter board.

The DSP-A1 offers a wide variety of sound field programs, from the HiFi DSP programs that reproduce the sound fields of world-famous concert halls, opera houses and jazz clubs, to the CINEMA DSP programs that deliver ideal theater sound in the home and handle various movie sound formats from monaural to

Dolby Digital and DTS Digital Surround. The technology that performs this high-precision, high-quality sound field processing is concentrated on one circuit board with a smaller board attached.

LSI System for High Precision Sound Field Processing

The processing board has digital input pins for Dolby Digital and DTS Digital Surround, as well as for the A/D and D/A converters. CINEMA DSP effects are based on accurate decoding in Dolby Pro Logic, Dolby Digital and DTS Digital Surround formats. That's why we use the original YSS-249 LSI, in the Dolby Digital and Dolby Pro Logic decoders. The use of ultra-precision 0.5-micron standard designing provides an even greater level of integration to ensure extremely faithful

and precise decoding.

Dolby Digital decoding is carried out on a single-chip 24-bit precision DSP core that allows full 5.1-channel decoding. The Dolby Pro Logic decoder built into the YSS-249 uses full digital processing to improve separation and provide accurate cross-fade with no fluctuations in level movement between channels.

The DSPI56009 chip that stores the DTS program developed by DTS Corp. operates at a 93MHz clock rate for the decoding of DTS digital surround.

Yamaha's superb YSS-214 LSI handles all sound field processing



YSS-249 LSI

ustic Technology.



Less frequently used controls hide behind a panel whose oil-damped door glides gracefully open at a slight touch.

functions. In addition to sophisticated DSP arithmetic/logic operations, this versatile chip also performs digital equalizer operations, enabling the DSP-A1 to offer Cinema EQ and a Center Graphic Equalizer.

Wide Range of Programs for Enjoying All Types of Audio and Video Genres

The DSP-A1 is equipped with 42 surround sound field programs that handle everything from movies, music videos and sports programs to pure music sources. To watch a science fiction space adventure movie, choose the newest program, Movie Theater Digital Sci-Fi. It will fill the room with the maximum in science-fiction effects, the infinity of space, zooming rocketships and galactic battles. For those who like jazz, we've built in a new sound-field program that reproduces the sound field of the Bottom Line, a famous New York jazz club. And the Entertainment programs include Disco, Game/Amusement and Party. No matter what type of audio or video entertainment you've selected, you'll enjoy it more with the DSP-A1's special programs.

High-Power, High-Quality Power Amplifier

Most of the massive interior of the DSP-A1 is given over to the power amplifier components, allowing it to deliver movie sound fields and music reproduction with a never-before-heard feeling of presence.

The DSP-A1 features an all-discrete configuration for the entire seven power amp channels that are used for CINEMA DSP playback. The surround channels handle Dolby Digital and DTS Digital Surround recorded with the same quality and range as the main channels, while the five left, center and right, rear-effect left and rear-effect right channels have exactly the same power and quality.

The amplifier's power capability is formidable: rated output of 110 watts for the left, center, right, and two rear effect channels, and 35 watts for the

two front effect channels.

Auto Priority Input Terminal Selection and Auto Decoder Selection

Digital input terminals are provided to handle any kind of digital input. Functions are programmed to select priority in order of AC-3RF, optical digital, coaxial digital and analog when different digital formats are input from the same source. The sound decoder is also automatically selected and processed according to the combination of the format of input signals and the selected sound field programs, while DSP sound field processing is optimized at the same time.

If MOVIE THEATER 70mm, for example, is selected and the input is a DTS signal, the DTS decoder is automatically engaged and a switch is made to Movie Theater DTS Sci-Fi. If the signal is Dolby Digital, then a switch is made to Movie Theater DGTL Sci-Fi, whereas if the input is PCM or analog, Movie Theater 70mm Sci-Fi is displayed. If a LaserDisc is played on Dolby Digital, the demodulator starts up and input automatically switches to AC-3RF.

The processing state and type of format that is input and selected is shown on the right side of the front panel display. When a digital source is being input and the effect is turned off, sampling frequency and number and type of channels are displayed.



● The DSP-A1 is also offered with a brilliant gold finish.

Macro-Command Remote Control Unit

The macro-command remote control unit has a learning function and controls for other Yamaha A/V system components, so additional functions can be operated with a touch of the finger. Data for up to seven macro-commands can be stored in memory for everyday use at the touch of a single button. One example would be turning the power on, selecting DVD/VCR 3 input, turning the power on to the DVD player, and starting play.

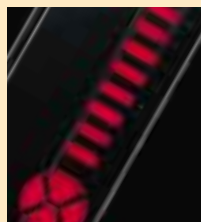
● Basic functions can be selected with the door closed; opening it gives you access to a wide range of additional controls.

● You can use the learning function to have the remote learn a total of 50 commands for various other components.

● There are 13 user-programmable macro keys. Each one can remember up to seven sequential commands. To program a key, you press the Macro button, select the macro key to be programmed, select the functions you want memorized, and press the Macro button again. Thereafter, the functions you have selected will be engaged, in order, each time you press that macro key.

● The DSP-A1 and the RX-V2095 have LED lighting.

The RX-V995 has luminescent lighting that stays bright for hours after 10-20 minutes exposure to light.



Digital Input and Output for DVD

The DSP-A1 offers a Dolby Digital (AC-3RF) input terminal for LD players that can handle Dolby Digital, five optical and three digital input terminals, and one digital Rec Out terminal for DVD players, MD recorders and CD players. Compatibility with each input means there is no need to bother with initial settings.

Rec Out Selector with BGV Function

The audio or video source can be recorded on VCR 1, 2 or 3 or Tape 1 or 2. You can also record a different source on Tape 1 or VCR 1. The BGV function allows you to record an audio source with a different video source.

Preout Terminals for All Channels Allow Use as a Processor with Effect Amp.

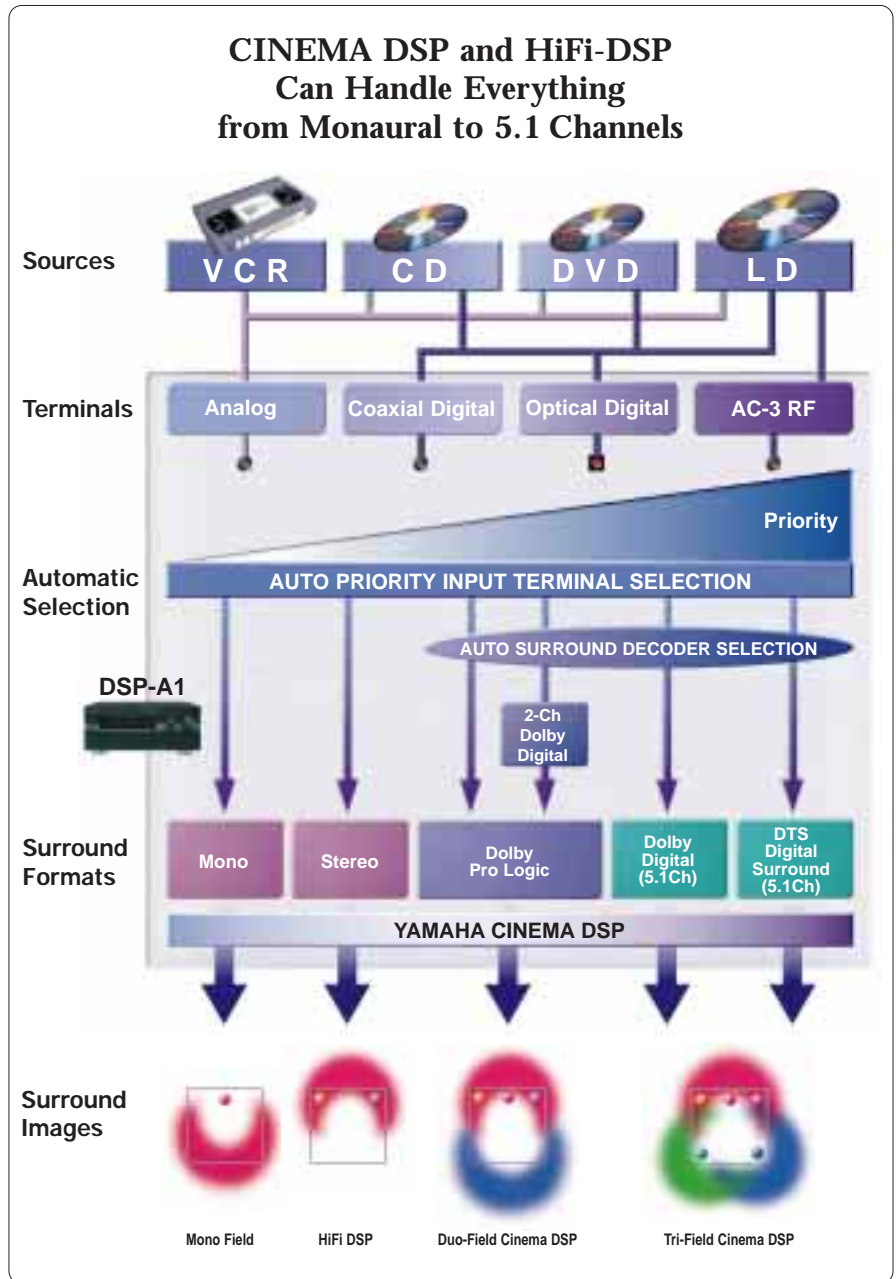
All channels are provided with preout terminals so you can add an external power amplifier to take even greater advantage of the DSP-A1's CINEMA DSP functions. The left, right and center channels have pre-main couplers, allowing operation as an independent three-channel power amplifier.

Full Capabilities for Future Expansion

In addition to the latest Dolby Digital and DTS Digital Surround functions, the DSP-A1 features external decoder input that allows the input of six analog channels for future formats such as MPEG multichannel and DVD audio.

Easy Operation

Operating the DSP-A1 is extremely easy. All you have to do is select your desired source and sound field pro-



DSP-A1 Inputs and Outputs

	Analog		Digital				Video	
	In	Out	Coaxial In	Coaxial Out	Optical In	Optical Out	Composite In	S Video Out
Phono	■							
CD			■					
Tuner	■							
MD/Tape 1		■			■			
Tape 2		■						
LD			■		■			
TV/DBS					■			
VCR 1	■						■	■
VCR 2		■					■	■
DVD/VCR 3		■			■		■	■
Video/Aux							■	■
Monitor								■

DSP-A1 Extensive System Connections

In addition to the 6-channel external decoder input terminals, there are pre-main and center couplers, rear- and front-effect channel preout terminals, subwoofer outputs (mono and 2 split), dual center speaker terminals (with switch), and speaker impedance selector. All speaker terminals are 2-way binding type (banana plug compatible). (Photo: DSP-A1 US model)

*VCR Out has capability to use monitor out.

gram. Preprogrammed modes require only a touch, while the macro-command remote control and on-screen functions let you customize operation for greater convenience.

Elegant in Every Respect

The DSP-A1 is a component that announces its (and your) commitment to quality in no uncertain terms. Its high-class image is further confirmed when you touch the knobs: they turn with ultra smoothness. Even the panel door is special: you don't have to push it all the way open, just a slight pressure on the bottom causes it to glide gracefully down. As befitting Yamaha's finest component, the DSP-A1 is elegant in every respect.

Bass Extension

Turn the bass extension switch on to provide +7dB boost to the main speaker's low end centered at 70Hz. Frequencies under 50 Hz will be cut by 12dB/oct. to prevent overdrive.

DSP-A1 Surround Programs

Program Name	PCM/Analog Input	Dolby Digital Input	DTS Input
● HALL 1	Hall A in Europe	←←←	←←←
	Hall B in Europe	←←←	←←←
	Hall C in Europe		
● HALL 2	Hall D in U.S.A.	←←←	←←←
	Hall E in Europe	←←←	←←←
	Live Concert		
● CHURCH	Tokyo		
	Freiburg	←←←	←←←
	Royaumont	←←←	←←←
● JAZZ CLUB	Village Gate		
	Village Vanguard	←←←	←←←
	The Bottom Line	←←←	←←←
● ROCK CONCERT	The Roxy Theatre		
	Warehouse Loft	←←←	←←←
	Arena	←←←	←←←
● ENTERTAINMENT	Disco		
	Party	←←←	←←←
	Game/Amusement	←←←	←←←
● CONCERT VIDEO 1	■ Pop/Rock	■	■
● CONCERT VIDEO 2	■ DJ	■	■
● TV THEATER	■ Classical/Opera	■	■
	■ Pavilion	■	■
● MOVIE THEATER 1	■ Mono Movie	←←←	←←←
	■ Variety/Sports	■	■
● MOVIE THEATER 2	■ 70mm Spectacle	■ DGTL Spectacle	■ DTS Spectacle
	■ 70mm Sci-Fi	■ DGTL Sci-Fi	■ DTS Sci-Fi
● MOVIE THEATER 2	■ 70mm Adventure	■ DGTL Adventure	■ DTS Adventure
	■ 70mm General	■ DGTL General	■ DTS General
● DOLBY/DTS SURROUND	■ Pro Logic/Enhanced	■ Dolby Digital/Enhanced	■ DTS Digital Sur./Enhanced
	■ Dolby Pro Logic/Normal	■ Dolby Digital/Normal	■ DTS Digital Sur./Normal

●: HiFi DSP Programs ●: A/V Programs
 ■: Duo-Field CINEMA DSP ■: Tri-Field CINEMA DSP

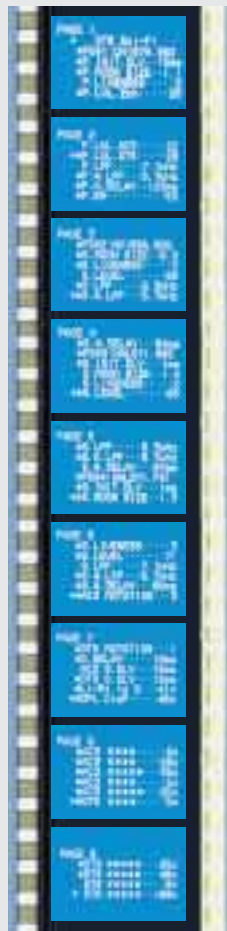
HiFi DSP and CINEMA DSP: an Amazing Variety of Sound Field Programs

HiFi DSP sound field programs
 HiFi DSP creates sound fields that have the realistic feel of specific places. The original input signal is output without any further processing, to which HiFi DSP adds a sound field. The decoded signal from a Dolby Digital or DTS source is output as is; only the reflected sound component is added. This allows you to hear a sound field so lifelike that you will feel as if you are actually in one of the world's great churches or concert halls.

HiFi DSP compatible with 5.1 channels can reproduce digital multichannel format music sources to further expand your entertainment possibilities.

CINEMA DSP sound field programs
 These programs automatically select decoders according to output to process one, two or three sound fields from monaural to 5.1-channel, providing the optimum sound field effect.

Closed Parameters



HiFi DSP

CINEMA DSP



Advanced tuning of closed user parameters

Parameter configuration differs according to the sound field program, but there are a total of 51 parameters for movies. The selectable range of the parameters, determined after auditioning a large number of movie sources, is from several tens to several hundreds of steps.

There are 11 parameters for the presence sound field, including the selection of the sound field pattern itself, room size, liveness and initial delay. There are 10 surround channel parameters for stereo and Dolby surround. The 15 parameters for Dolby Digital include surround sound field pattern, delay types, liveness and mixing rate types. The 15 parameters for DTS Digital Surround include independent surround sound field patterns, delay types, liveness and mixing rate types.

Flagship Receiver for Revolutionary Ho



RX-V2095 Digital Home Theater Receiver



The RX-V2095 gives you an incredible range of revolutionary performance features for home theater enjoyment, with seven powerful amplifier channels, Tri-Field/Duo-Field CINEMA DSP, HiFi DSP and DTS Digital Surround, and Dolby Digital processing. Plus extra benefits like multi-room capability and on-screen display. If you've decided to assemble a high-end home theater system, this is the place to start.

Vitally Important A/D and D/A Converters Offer Superb Performance

The interfacing of data-rich digital signals and high quality analog signals makes sophisticated A/D and D/A converters indispensable to efficient sound field processing.

The RX-V2095 uses delta-sigma format A/D converters with 20-bit, 64-times oversampling to input analog signals into the sound field processor. It also uses delta-sigma format D/A converters with 20-bit, 8-times oversampling and superior jitter-resistant characteristics to convert the total 8-channel CINEMA DSP sound field output, including Dolby Digital/DTS Digital Surround low-frequency effect (LFE) signals, to analog. The CINEMA DSP digital data that reproduces everything, even the subtle air spaces in a concert hall, is thus flawlessly converted to high quality audio signals.

Wide Range of Programs for Enjoying All Types of Audio and Video Genres

The RX-V2095 is equipped with 36 surround sound field programs that handle everything from movies, music videos and sports programs to pure music sources. To watch a science fiction space adventure movie, choose the newest program, Movie Theater Digital Sci-Fi. It will fill the room with the maximum in science-fiction effects, the infinity of space, zooming rocket-ships and galactic battles. No matter what type of audio or video entertainment you've selected, you'll enjoy it more with the RX-V2095's special programs.

DTS Digital Surround and Dolby Digital

This new system of digital encoding gives movie viewers the most realistic sound sensation yet. And now you can enjoy the same spectacular stereo surround effects in your home as well, thanks to the RX-V2095's built-in DTS and Dolby

Digital processing capability.

More "Live" Experiences

To add more life to your favorite music, there are six HiFi DSP programs, based on data from actual performance venues: Concert Hall, Rock Concert, Stadium, Jazz Club, Disco and Church.

High Power 7-Channel Output

In order to allow you to take full advantage of CINEMA DSP's capabilities, the RX-V2095 provides seven channels of amplification. Using seven speakers, you'll hear sound with amazing presence and imaging. And since the main, center and rear effect channels are all rated at 100W, there's more than enough power to bring out the full dynamics of every source.

Carefully Selected High Quality Parts

All parts were strictly selected and subjected to repeated listening tests to ensure that only the best were used. For example,

me Theater Performance and Control

the super-low impedance power supply transformer with a forced-draft cooling fan is equipped with large 35mm diameter x 100mm high block-chemical capacitors built with low multiplier foil for high audio quality. In addition to the use of high precision eight-gang main volume and high quality PPS capacitors, etc., the RX-V2095 stops at nothing to achieve the finest in high quality audio, even to the use of the best in internal wiring material.

Logical Interior Design

The use of highly integrated LSIs allows construction that places priority on quality by positioning the sound field processing and digital processing blocks into a small area on the right side of the cabinet.

Auto Priority Input Terminal Selection and Auto Decoder Selection

Digital input terminals are provided to handle any kind of digital input. Functions are programmed to select priority in order of coaxial digital, optical digital and analog when different digital formats are input from the same source.

The sound decoder is also automatically selected and processed according to the combination of the format of input signals and the selected sound field programmes, while DSP sound field processing is optimized at the same time.

Multi-Room, Multi-Source Operation

The RX-V2095 has a Multi-Room function that lets you listen to its audio output in two different rooms. Zone 2 has its own remote control unit, so you can control the major functions of all the components. You can also listen to an audio source different from that playing in the main room.



RX-V2095 Hidden Control Panel

Total Convenience

A comprehensive On-Screen Display with a convenient Set Menu lets you select and adjust a wide variety of functions. It includes a speaker display that makes it easier to balance speaker output in the Speaker Test Mode. You can select each of the DSP programs with the remote control so you can compare the effects from your listening position. An A/V Rec Out Selector lets you listen to one source while you record another, and Yamaha's advanced new learning-capable remote control unit makes operation easy and lets you control all the other components.



Multi-Command Learning-Capable Remote Control Unit and System Remote Control Unit for Remote-Zone Use



Six-Channel External Decoder Input

Useful if you want to give your home theater system even higher capabilities, and for future movie formats.

Superb Sound Quality

The RX-V2095 has High Dynamic Power, Low-Impedance Drive capability and Linear Damping Circuit. This means it can deliver large amounts of reserve power for accurate reproduction of the high energy peaks that are common in digital audio sources.

Extensive System Connectivity

In addition to the components you're already planning to connect to the RX-V2095, you may decide to add a few more in the future. Fear not: you can hook up five audio/video units (such as a VCR) and three audio components. Special advantages include S-video terminals and digital optical and coaxial inputs.

Other Notable Features

- Remote Controllable Motor-Driven Master Volume Control (motor-driven with indicator) and Subwoofer Output Level
- Tone Bypass Switch
- Bass Extension Switch
- Sleep Timer
- 40-Station AM/FM Random Access Preset Tuning
- Auto FM Station Memory and Preset Editing Tuning



RX-V2095 Extensive System Connections

In addition to 6-channel external decoder input terminals, there are pre-main coupler, and center, rear- and front-effect channel preout terminals, subwoofer output with low pass filter, an I/O port for multi-room audio capability, and speaker impedance selector. All speaker terminals are 2-way binding type (banana plug compatible).

RX-V2095 Inputs and Outputs

	Analog		Digital		Video			
	In	Out	Coaxial In	Optical In	Composite In	S Video In	Out	Out
Phono	■							
CD	■		■	■				
Tape/MD	■	■		■				
DVD/LD	■		■		■			
TV/DBS	■			■	■			
VCR 1	■	■			■	■	■	■
VCR 2	■	■			■	■	■	■
Video Aux	■				■		■	
TV Monitor							■	■
Zone 2 Out		■					■	



Top-Class A/V Receiver for Total Home Theater Entertainment

This highly sophisticated Home Theater Receiver includes all of Yamaha's latest technological breakthroughs. You'll enjoy its Tri-Field and Duo-Field CINEMA DSP, HiFi DSP, Dolby Digital, and DTS Digital Surround programs as well as its superb operating convenience.



RX-V995 Digital Home Theater Receiver



Cinema DSP Compatible with All Movie Audio Formats

The RX-V995 is equipped with 25 surround sound field programs to bring out the best from all audio and video sources. The CINEMA DSP programs will make in-home movies an entirely new experience. And these programs are compatible with all movie audio formats, including Dolby Digital and DTS Digital Surround.

Advanced Yamaha Digital Technologies

One of the main reasons for the RX-V995's outstanding performance capabilities is the YSS-918 - Yamaha's most advanced LSI. Incorporating Dolby Digital and DTS decoders, as well as all DSP processing circuitry, this is the world's most sophisticated audio microchip. And for highest audio quality, the circuitry includes a 64fs, 20-bit A/D converter and an 8fs, 20-bit D/A converter. Four optical and two coaxial digital input terminals are provided for direct

digital input from other components.

100W x 5-Channel Power Output

Supplying equal power to all five channels (main x 2, rear effect x 2 and center) is important for achieving maximum surround sound field effect, and that's just what you'll get, thanks to an awesome 100W of power per channel. Using five high quality speakers, you'll hear sound with amazing presence, detail and imaging.

Superb Sound Quality

The RX-V995 features High Dynamic Power, Low-Impedance Drive to deliver large amounts of power for accurate reproduction of the high energy peaks common in digital audio sources. Linear Damping cancels the effects of level and frequency variations for a high, stable damping factor.

Full Operating Convenience

Designed to function as your main system

command center, the RX-V995 is logical and simple to operate. Yamaha's "Set Menu" makes it easy to "fine-tune" your system's sound.

Other Notable Features

- Auto Surround Decoder and Auto Priority Input Terminal Selection
- 6-Channel External Decoder Input for Other Future Formats
- A/V Rec Out Selector
- 9-Position Rotary Encode Input Selector
- Logical On-Screen Display with Speaker Test Mode
- Bass Extension Switch
- Tone Bypass Switch
- I/O Port for Custom Installation
- Macro-Command Learning-Capable Remote Control Unit



RX-V995 Inputs and Outputs

	Analog		Digital				Video			
	In	Out	Coaxial In	Coaxial Out	Optical In	Optical Out	Composite In	Composite Out	S Video In	S Video Out
Phono	■									
CD	■		■		■					
Tape/MD	■	■			■	■				
DVD/LD	■		■		■		■			■
TV/DBS	■				■		■			■
VCR 1	■	■					■	■		■
VCR 2	■	■					■	■		■
Video Aux	■						■			■
TV Monitor								■		■
Zone 2 Out		■						■		

RX-V995 Extensive System Connections

In addition to six-channel external decoder input terminals, there are main, center and rear effect channel preout terminals, subwoofer output with low pass filter, and speaker impedance selector. All speaker terminals are 2-way binding type (banana plug compatible).



Assurance of Sublime Home Theater Pleasure

A great choice to power and control your home theater system. It gives you a wide selection of sound field programs, superb audio performance, and plenty of features that make operation easy and convenient.



RX-V795 Digital Home Theater Receiver



25 Sound Field Programs Let You Vary Your Listening Enjoyment

With 25 sound field programs to choose from, including 17 CINEMA DSP and 5 HiFi DSP programs, you'll be able to optimize your audio output for every source and try some interesting combinations. Dolby Digital and DTS Digital Surround decoders are built-in, so you can enjoy exciting sound fields like Spectacle, Sci-Fi and Adventure with the latest movie releases.

Advanced Yamaha Digital Technologies

One of the main reasons for the RX-V795's outstanding performance capabilities is the YSS-918 - Yamaha's most advanced LSI. Incorporating Dolby Digital and DTS decoders, as well as all DSP processing circuitry, this is the world's most sophisticated audio microchip. And for highest audio quality,

the circuitry includes a 64fs, 20-bit A/D converter and an 8fs, 20-bit D/A converter. Three optical and one coaxial digital input terminals are provided for direct digital input from other components.

Full Operating Convenience

Designed to function as your main system command center, the RX-V795 is logical and simple to operate. Yamaha's "Set Menu" makes it easy to "fine-tune" your system's sound, and an 8-Position Rotary Encode Input Selector allow quick source selection for listening and recording. Both master volume and subwoofer level can be controlled from the remote.

Outstanding Sound Quality

Supplying equal power to all five channels is important for achieving maximum surround sound field effect, and the RX-

795 delivers with a full 85W per channel. High Dynamic Power, Low-Impedance Drive capability means that this receiver will deliver large amounts of reserve power for accurate reproduction of the high energy peaks common in CDs and other digital sources. Yamaha's exclusive Linear Damping, Tone Bypass switch and a Bass Extension control are just some of the other features that ensure highest audio quality.

Other Notable Features

- Auto Surround Decoder and Auto Priority Input Terminal Selection
- I/O Port for Custom Installation
- Logical On-Screen Display with Speaker Test Mode
- Universal-Type Remote Control Unit with Preset Code for TV, VCR, etc.



RX-V795 Inputs and Outputs

	Analog		Digital				Video	
	In	Out	Coaxial In	Coaxial Out	Optical In	Optical Out	Composite In	S Video Out
Phono	■							
CD	■				■			
Tape/MD	■	■						
DVD/LD	■		■					
TV/DBS	■				■			
VCR	■	■					■	■
Video Aux	■						■	■
TV Monitor							■	■

RX-V795 Extensive System Connections

In addition to 6-channel external decoder input terminals, there are main, center, and rear effect channel preout terminals. subwoofer output with low pass filter, and an I/O port for multi-room capability. Main channel speaker terminals are 2-way binding type (banana plug compatible).



Move Up to the Pleasure of Fine Home Theater Sound

Stop listening to movies through your tiny TV speakers and discover the true pleasure that a digital home theater system can bring. The RX-V595 is a great component to build that system around: it has powerful output, a wide selection of DSP programs, and a whole host of useful audio features.



RX-V595 Digital Home Theater Receiver



Cinema DSP Compatible with All Movie Audio Formats and Advanced Yamaha Digital Technology

This receiver gives you a choice of 11 DSP sound field programs, including six CINEMA DSP choices and three HiFi DSP programs. You can select the program to best match the movie or music you're listening to. Yamaha's powerful YSS-908 LSI incorporates a Dolby Digital decoder and DSP processing circuits, and there are 6-channel external decoder input terminals for DTS Digital Surround and other future formats—which means the RX-V595 is compatible with any movie you may choose to watch. The rear panel also has two optical and one coaxial digital input terminals for direct input of digital signals from other components.

Sophisticated Control Capabilities with Convenient "Set Menu"

A convenient Set Menu lets you select

and adjust a wide variety of functions. It includes a speaker display that makes it easier to balance speaker output in the Speaker Test Mode. You can select each of the DSP programs with the remote control so you can compare the effects from your listening position. Center and Effect Level Controls are also provided, and an 8-Position Rotary Encode Input Selector makes it a simple matter to balance the outputs of all speakers for optimum imaging. Subwoofer level is remote controllable.

5-Channel High Power Output, Extensive A/V Connections

The RX-V595 delivers 70W of power to each of its five channels: main, center and rear effect, to surround you with dynamic sound. The amplifier also features High Dynamic Power, Low-Impedance Drive capability and a Linear Damping Circuit. This means it has large amounts of reserve power for

high-energy musical peaks, and a high, stable damping factor for maximum sound quality. Four A/V and three audio inputs allow you to connect all the components you need.

Other Notable Features

- Direct DSP Program Access
- Remote Controllable Motor-Driven Master Volume Control
- Sleep Timer
- 40-Station AM/FM Random Access Preset Tuning
- Auto FM Station Memory and Preset Editing
- Multi-Status Station Memory
- Direct PLL IF Count Synthesizer Tuning for Tuning Accuracy
- Universal-Type Remote Control Unit with Preset Code for TV, VCR, etc.



RX-V595 Inputs and Outputs

	Analog		Digital				Video	
	In	Out	Coaxial		Optical		Composite	
	In	Out	In	Out	In	Out	In	Out
Phono	■							
CD	■							
Tape/MD	■	■						
DVD/LD	■		■		■		■	
TV/DBS	■				■		■	
VCR	■	■					■	■
Video Aux	■						■	
TV Monitor								■

RX-V595 Extensive System Connections

The rear panel offers 6-channel external decoder input terminals, subwoofer output with low pass filter, and speaker impedance selector. Main channel speaker terminals are 2-way binding type (banana plug compatible).



Powerful and Versatile Audio/Video Control Center

You'll enjoy music and movie sound at full intensity, thanks to the RX-V495's Equal Output Power for Five Channels: 60W x 5. It offers Tri-Field CINEMA DSP, Dolby Digital, HiFi DSP, a wide array of convenient functions, and a Universal Remote Control Unit.



RX-V495 Digital Home Theater Receiver



An Amazing Selection of Digital Home Theater Features

The RX-V495 provides an amazing array of sophisticated features compared to other receivers in its class. The Digital Movie Theater program makes use of Yamaha's most advanced Tri-Field CINEMA DSP technology to create an extraordinarily realistic sound field in your home theater. There are also three CINEMA DSP programs, as well as Dolby Digital, Dolby Pro Logic and five HiFi DSP programs. All your movies and music will take on new dimensions of excitement with these sound field programs. If you want to enjoy a movie in DTS Digital Surround or other format, an input terminal is provided for a 6-channel external decoder.

Sophisticated Control Capabilities with Convenient "Set Menu"

A convenient Set Menu lets you select

and adjust a wide variety of functions. It includes a speaker display that makes it easier to balance speaker output in the Speaker Test Mode. You can select each of the DSP programs with the remote control so you can compare the effects from your listening position. Center and Effect Level Controls are also provided, and an 8-Position Rotary Encode Input Selector makes it a simple matter to balance the outputs of all speakers for optimum imaging. Subwoofer level is remote controllable.

High-End Audio Quality

This receiver utilizes the same outstanding audio technology as the high-end models, including High Dynamic Power, Low-Impedance Drive Capability and Linear Damping circuit, so sound performance leaves nothing to be desired.

Upgraded Tuning Convenience

The RX-V495 has been designed to make station selection as fast and convenient as possible. And when the station is tuned in, sophisticated circuitry ensures that it will be strong and clear.

Other Notable Features

- Direct DSP Program Access
- Sleep Timer
- 40-Station AM/FM Random Access Preset Tuning
- Auto FM Station Memory and Preset Editing
- Multi-Status Station Memory
- Direct PLL IF Count Synthesizer Tuning for Tuning Accuracy
- Universal-Type Remote Control Unit with Preset Code for TV, VCR, etc.



RX-V495 Inputs and Outputs

	Analog		Digital				Video	
	In	Out	Coaxial		Optical		Composite	
			In	Out	In	Out	In	Out
Phono	■							
CD								
Tape/MD	■	■						
DVD/LD	■		■		■		■	
TV/DBS	■						■	
VCR	■	■					■	■
Video Aux	■						■	
TV Monitor								■

RX-V495 Extensive System Connections

The rear panel offers 6-channel external decoder input terminals, subwoofer output with low pass filter, and speaker impedance selector. Main channel speaker terminals are 2-way binding type (banana plug compatible).

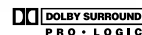


High Class Digital Home Theater Performance

There's no doubt that the RX-V395 is the leading receiver in its class. With CINEMA DSP, HiFi DSP and Dolby Digital ready, its reproduction of audio and video sources is truly outstanding. And with equal power output rated at 60W x 5, that sound will be big enough to please everyone. A Universal Remote Control is supplied.



RX-V395 Digital Home Theater Receiver



CINEMA and HiFi DSP

Yamaha's CINEMA DSP technology provides a 35mm Movie Theater (Dolby Pro Logic/Enhanced) program that produces the same type of sound you hear in theaters with multi-speaker arrays. There are also five HiFi DSP programs.

Six-Channel External Decoder Input

If you want to give your home theater system even higher capabilities, you'll want to consider Dolby Digital or DTS Digital, Surround. The RX-V395 is ready whenever you are, because it accepts the six-channel discrete input signals from components such as DVD players compatible with those formats.

No Compromises Where Sound Quality Is Concerned

Sound quality is something that Yamaha never compromises, and it's proven in this receiver. It has high dynamic power with low-impedance drive capability, as well as our Linear Damping Circuit.

High Dynamic Power, Low-Impedance Drive Capability

Yamaha amplifiers/receivers are capable of delivering large amounts of reserve power for accurate reproduction of the high energy peaks that are especially prevalent in digital audio sources. This emphasizes the music's dynamic qualities and provides a sharper sound image.

Linear Damping

Level variations due to high amp impedance tend to reduce an amplifier's damping factor, and frequency variations cause it to fluctuate. This circuit cancels the effect of these variations, maintaining a high, stable damping factor. The result is superior articulation of all sounds and better frequency response.

Tuner Section Features High Quality, Easy Operation

In addition to utilizing the same Direct PLL If Count Synthesizer Tuning system as the other Yamaha Digital Home

Theater receivers, the RX-V395 also makes station selection easy. You can preset as many as 40 stations for instant one-touch tuning, and with each one the tuning mode (stereo or mono) is also memorized. This model even has a unique feature not offered on the other receivers. Auto FM Station Memory will automatically preset the 40 strongest stations on the dial for you. You can then use Preset Editing to rearrange them into groups.

Other Notable Features

- Speaker Test Mode
- Effect On/Off Switch
- Center and Rear Effect Level Controls
- Remote Controllable Motor-Driven Master Volume Control
- Sleep Timer
- Universal-Type Remote Control Unit with Preset Code for TV, VCR, etc.



RX-V395 Extensive System Connections

The rear panel offers 6-channel external decoder input terminals, subwoofer output with low pass filter, and speaker impedance selector. Main channel speaker terminals are 2-way binding type (banana plug compatible).

RX-V395 Inputs and Outputs

	Audio		Video	
	In	Out	In	Out
Phono	■			
CD	■			
Tape/MD	■	■		
DVD/LD			■	
TV/DBS	■		■	
VCR	■	■	■	■
Monitor				■

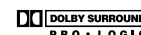


A Great Way to Upgrade to CINEMA DSP

If you already have a two-channel amplifier or receiver, and would like to upgrade your "audio" system to a true "home theater" system, adding the DSP-E492 is a perfect way to do it. You get CINEMA DSP capabilities, and Dolby Digital compatibility. Plus, of course, a whole lot more. A great choice for anyone who's tired of dull movie sound.



DSP-E492 Digital Home Theater Processor/Amplifier



Powerful Amplifier

The DSP-E492 delivers three-channel power: to the center speaker and two rear effect speakers. Each channel is rated at a high 60W, more output than many so-called "high power" systems offer. In combination with your main amplifier, this gives you a five-channel surround sound system with dynamic sound.

Six-Channel External Decoder Input

If you want to give your home theater system even higher capabilities, you'll want to consider Dolby Digital and DTS Digital Surround. The DSP-E492 is ready whenever you are, because it accepts six-channel input signals from Yamaha's DVD Player and other components. A handy Processor Selector lets you set for internal or external processor.

CINEMA and HiFi DSP

Yamaha's CINEMA DSP technology

provides Dolby Pro Logic/Enhanced (35mm Movie Theater) and Concert Video programs that produce the same type of sound you hear in theaters with multi-speaker arrays. There are also five HiFi DSP programs: Mono Movie for A/V sources, Concert Hall, Disco, Stadium and Rock Concert for audio sources.

Extensive Control and Convenience

The remote control makes operation very convenient, giving you Direct DSP Program Access, so you can monitor the effect of each program with one touch from your listening position. You can also use the remote to adjust Digital Delay parameters so the sound you hear is exactly the way you like it.

No Compromises Where Sound Quality Is Concerned

Sound quality is something that Yamaha never compromises, and it's proven in

this processor. It has an all discrete amplifier configuration, high dynamic power with low-impedance drive capability, and our Linear Damping Circuit.

Expansion Capabilities

The DSP-E492 gives you the ability to further upgrade your audio system. Pre Out Terminals for main, center and rear effect channels let you connect additional power or integrated amplifiers, and a subwoofer output terminal.

Other Notable Features

- Speaker Test Mode
- Remote Controllable Motor-Driven Master Volume Control
- Center and Rear Effect Level Controls
- Tape Monitor Switch



DSP-E492 Inputs and Outputs

	Audio		Video	
	In	Out	In	Out
CD (Line 1)	■			
Tuner (Line 2)	■			
Tape (MD) Monitor		■		
DVD/LD	■		■	
TV/DBS	■		■	
VCR	■	■	■	■
Monitor				■

DSP-E492 Rear Panel Connections

In addition to the six-channel external decoder input terminals, there are two mono subwoofer output terminals, and preouts for main, center and rear effect channels.

Comparison of Digital Home Theater Components

Models	Digital Channels	Main	Center	Rear Effect	Front Effect
● DSP-E492	Processor for 5-ch	Not provided	C	RL/RR	FL/FR
● DSP-A1	7-Ch Amplifier	L/R	C	RL/RR	FL/FR
● RX-V2095	7-Ch Receiver	L/R	C	RL/RR	FL/FR
● RX-V995	5-Ch Receiver	L/R	C	RL/RR	
● RX-V795	5-Ch Receiver	L/R	C	RL/RR	
● RX-V595	5-Ch Receiver	L/R	C	RL/RR	
● RX-V495	5-Ch Receiver	L/R	C	RL/RR	
● RX-V395	5-Ch Receiver	L/R	C	RL/RR	

[REMARKS]

- Add-On Type: By connecting this component to your present amplifier or receiver, you can enjoy Cinema DSP.
- Integrated Type: These components have built-in amplifiers with the above numbers of channels.

Maximize Your Viewing and Listening Pleasure



DVD-S795 DVD Player



The DVD-S795 features Cinema Image and Cinema Dialogue functions that maximize the clarity of images of dialogue while you are watching movies. A 10-bit video DAC and 96kHz, 24-bit audio DAC ensure that signal quality is always at the highest level. In addition, a Dolby Digital decoder and DTS Digital Out provide compatibility with these two high quality movie formats.

Quick and Easy Operation

On-screen menu icons make it easy to select the desired track and all other playback commands. Fast Picture Start minimizes the delay after loading a disc and Quick-Review Replay makes it easier to find a desired scene.

Extremely Versatile

In addition to DVD, VCD (version 2.0) and CD disc compatibility, the DVD-S795 provides multi-angle (9), multi-aspect, multi-language (8) and multi-subtitle (32) capabilities. The Dolby Digital decoder has 6-channel output and a set menu for speaker set, speaker level control and center/rear effect delay time control. Multiple video outputs (composite x 2, S-video and component video) provide added flexibility.

Superb Video and Audio Quality

A DVD disc holds 10 times as much information as a CD, giving you out-

standing video and audio clarity. To make the most of this capability, Yamaha uses a 10-bit video DAC and a 96kHz, 24-bit audio DAC to ensure the highest possible quality. There are optical and coaxial digital outputs for DTS Digital Surround, Dolby Digital and PCM.

Other Notable Features

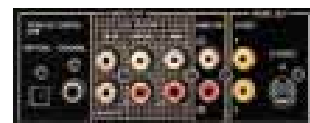
- Low-Impedance Power Supply
- High Quality Selected Parts
- Gold-Plated Terminals (all pin jacks)
- Cinema Image
- Cinema Dialogue
- DTS Digital Out
- Program and Random Play
- Auto Power Off

Main Specifications

- Signal-to-Noise Ratio: 115 dB (CD-DA)
- Frequency Response: 2—20,000 Hz (CD-DA/VCD);

- 2—22,000 Hz (DVD 48 kHz sampling);
- 2—44,000 Hz (DVD 96 kHz sampling)

- Dynamic Range: 103 dB (DVD 48 kHz, 24 Bit); 100 dB (CD-DA)
- Harmonic Distortion + Noise (1 kHz): 0.002%
- Dimensions (W x H x D): 435 x 100 x 280 mm; 17-1/8" x 3-15/16" x 11"
- Weight: 3.6 kg; 7 lbs. 15 oz.



Component video output terminals

Component video output terminals allow the three color signals to be transmitted directly to a monitor for maximum quality.

Yamaha's Total Commitment to Excellence Creates the Ultimate in Home Entertainment.

Yamaha's commitment to excellence in audio, and specifically CINEMA DSP, starts with the building blocks of digital sound field processing, LSIs (large scale integrated circuits). We design and manufacture our own LSIs, allowing our audio engineers to decide precisely what type of circuit design they want from the beginning, rather than having to "design around" an already completed chip. The latest example of our LSI expertise is the amazing YSS-918. This single chip incorporates all the circuitry necessary for digital processing, capabilities that previously required two, three or more LSIs. It performs both Dolby Digital and DTS Digital Surround decoding with extreme accuracy, as well as all digital sound field processing chores, drawing on its massive sound field program data banks. The YSS-918 is without a doubt the most powerful and sophisticated audio LSI ever created.



Yamaha Newest Original YSS-918 LSI incorporates Dolby Digital, DTS and DSP processing circuits.



Surround Programs

RX-V2095 Surround Programs

Program Name	Analog Input	Dolby Digital Input	DTS Input
● CONCERT HALL 1	Europe Hall A	←←←	←←←
	Europe Hall B	←←←	←←←
● CONCERT HALL 2	U.S.A. Hall C	←←←	←←←
	Live Concert	←←←	←←←
● CHURCH	Freiburg	←←←	←←←
	Royaumont	←←←	←←←
● JAZZ CLUB	The Bottom Line	←←←	←←←
	Village Gate	←←←	←←←
● ROCK CONCERT	The Roxy Theatre	←←←	←←←
	Arena	←←←	←←←
● ENTERTAINMENT	Disco	←←←	←←←
	Party	←←←	←←←
● STADIUM	Anaheim Bowl	←←←	←←←
● CONCERT VIDEO 1	Classical/Opera	■	■
	Pop/Rock	■	■
● TV THEATER	Mono Movie	←←←	←←←
	Variety/Sports	■	■
● MOVIE THEATER 1	70mm Spectacle	■ DGTL Spectacle	■ DTS Spectacle
	70mm Sci-Fi	■ DGTL Sci-Fi	■ DTS Sci-Fi
● MOVIE THEATER 2	70mm Adventure	■ DGTL Adventure	■ DTS Adventure
	70mm General	■ DGTL General	■ DTS General
● DOLBY/DTS SURROUND	Pro Logic/Enhanced	■ Dolby Digital/Enhanced	■ DTS Digital Sur./Enhanced
	Dolby Pro Logic/Normal	■ Dolby Digital/Normal	■ DTS Digital Sur./Normal

RX-V995/RX-V795 Surround Programs

Program Name	Analog Input	Dolby Digital Input	DTS Input
● CONCERT HALL	←←←	←←←	←←←
● CHURCH	←←←	←←←	←←←
● JAZZ CLUB	←←←	←←←	←←←
● ROCK CONCERT	←←←	←←←	←←←
● DISCO	←←←	←←←	←←←
● TV SPORTS	←←←	■	■
● MONO MOVIE	←←←	←←←	←←←
● MOVIE THEATER 1	70mm Spectacle	■ DGTL Spectacle	■ DTS Spectacle
	70mm Sci-Fi	■ DGTL Sci-Fi	■ DTS Sci-Fi
● MOVIE THEATER 2	70mm Adventure	■ DGTL Adventure	■ DTS Adventure
	70mm General	■ DGTL General	■ DTS General
● DOLBY/DTS SURROUND	Pro Logic/Enhanced	■ Dolby Digital/Enhanced	■ DTS Digital Sur./Enhanced
	Dolby Pro Logic/Normal	■ Dolby Digital/Normal	■ DTS Digital Sur./Normal

RX-V595/RX-V495 Surround Programs

Program Name	Analog Input	Dolby Digital Input
● CONCERT HALL	←←←	←←←
● ROCK CONCERT	←←←	←←←
● DISCO	←←←	←←←
● MONO MOVIE	←←←	←←←
● TV SPORTS	■	■
● MOVIE THEATER	70mm Movie Theater	■ DGTL Movie Theater
● DOLBY SURROUND	Pro Logic/Enhanced	■ Dolby Digital/Enhanced
	Dolby Pro Logic/Normal	■ Dolby Digital/Normal

RX-V395/DSP-E492 Surround Programs

Program Name	Analog Input
● CONCERT HALL	←←←
● ROCK CONCERT	←←←
● DISCO	←←←
● STADIUM	←←←
● MONO MOVIE	←←←
● CONCERT VIDEO	←←←
● DOLBY SURROUND	Pro Logic/Enhanced
	Dolby Pro Logic/Normal

Remarks

- : HiFi DSP Programs
- : A/V Programs
- : Duo-Field CINEMA DSP
- : Tri-Field CINEMA DSP

APD-1

Dolby Digital LaserDisc RF Signal Demodulator

- Dolby Digital RF Demodulator for Connecting Dolby Digital Compatible LD Player
- Optical and Coaxial Digital Outputs
- Yamaha Original Dolby Digital Decoder LSI

- 100 x 63 x 133 mm (3-15/16" x 2-1/2" x 5-1/4") (W x H x D)
- 0.8 kg (1 lbs. 12 oz.)

Present and Future Compatibility

No matter what the sound source—CD, VCR, LD, DVD or future formats such as DVD Audio and SACD (Super Audio Compact Disc)—Yamaha components are fully compatible.

What are the reasons behind Yamaha's success?

First and foremost is our dedication to natural sound quality. Whether you are listening to a movie soundtrack, a recorded concert or other types of music, we believe that you should experience a feeling of realistic presence, as though you were actually there at the event.

We realize this by creating products using the world's most advanced audiototechnology, including the ability to develop and manufacture our own LSIs.

Our greatest achievement is HiFi and CINEMA DSP, which use actual acoustic data from concert halls, theaters and other venues to create sound fields that provide an unmatched sense of realism.

Main Awards (From Spring '98)

Product	Country	Publication	Issue	Commendation	
• AV Amplifiers					
DSP-A1	Europe	EISA (European Imaging & Sound)	Year, '98	European home theater amp of '98-'99	
DSP-A1	Australia	Sound & Image	Year '98	Winner; AV amplifier of the year over \$1000	
DSP-A1	UK	WHAT HI*FI	Year, '98	Winner; Highly recommended	
DSP-A1	UK	Home Entertainment	Year, '98	Editor's award for home entertainment excellence	
DSP-A1	Japan	HiVi	Feb. '98	HiVi grand prix; Gold award	
DSP-A1	Sweden	HemmaBio	No.3 '98	★★★★★, Theater sound; ★★★★★, Value for money	
DSP-A1	Japan	Sound Pal	Apr., '98	Shogakkan sound award	
DSP-A1	Norway	LYD & BILDE	No.5, '98	Alone at the top	
DSP-A1	Sweden	High Fidelity	No.5, '98	Excellent	
DSP-A1	UK	Home Cinema Choice	May, '98	Best buy	
DSP-A1	UK	WHAT HI*FI	June, '98	★★★★★	
DSP-A1	UK	WHAT VIDEO&TV	June, '98	Best buy	
DSP-A1	U.S.	Stereo Review	June, '98	An altogether outstanding piece	
DSP-A1	U.S.	Video	June, '98	State of the art	
DSP-A1	Japan	HiVi	June, '98	Best buy in summer	
DSP-A1	Japan	AV Review	June, '98	AV amp scrambled test; 93 points	
DSP-A1	U.S.	Home Theater	July, '98	95 points: Define the state of the art	
DSP-A1	U.S.	Audio	July, '98	Has a marvelous ability to enfold you in sound	
DSP-A1	Germany	Video	July, '98	Best digital amp in the world	
DSP-A1	Germany	Video Vision	July, '98	New reference	
DSP-A1	Denmark	HIFI	Aug, '98	Master of processing	
DSP-A1	Germany	Heimkino	Aug./Sept., '98	Very good in all formats	
DSP-A1	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Product of the year	
DSP-A1	Germany	Audio	Sept., '98	99999	
DSP-A1	France	Home Theater	Oct., '98	The best AV amplifier.	
DSP-A1	Portugal	Audio	Oct., '98	The new reference	
DSP-A1	Germany	Video	Dec., '98	AV receiver/amp, reader's choice 1st position	
DSP-A1	Germany	Audio Vision	Nov./Dec., '98	Very good	
DSP-A1	UK	WHAT VIDEO & TV	Jan., '99	WHAT VIDEO & TV award '99	
DSP-A1	Germany	Hifi Test	Jan., '99	Very good	
• AV Receivers/AV Processors					
RX-V2095	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; product of the year	
RX-V2095	U.S.	Home Theater	Jan., '99	More detail and clarity than any receiver has a right to have	
RX-V795RDS	Germany	Video	Jan., '99	Recommended	
RX-V393RDS	Germany	Stereo	Sept., '98	Good	
RX-V393RDS	UK	Home Cinema Choice	Oct., '98	Best buy	
DSP-E492	UK	WHAT HI*FI	Year, '98	Winner; Highly recommended	
DSP-E492	Germany	Heimkino	Apr., '98	C/P extraordinary, very good nothing negative	
DSP-E492	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Product of the year	
• DVD Players					
DVD-S700	UK	WHAT HI*FI	Sept., '98	★★★★★	
DVD-S700	Germany	Video	Jun., '98	Test winner	
DVD-S700	UK	WHAT HI*FI	Year., '98	Award winner; Highly recommended	
DVD-S700	France	DIAPASON	Dec., '98	★★★★★	
DVD-S700	Portugal	Audio	Dec., '98	The best DVD ever tested	
• Systems					
AV-1	Australia	Sound & Image	Year, '97 & '98	Highly commended; Audio system of the year \$1000-\$1999	
AV-1	Germany	Image Home Entertainment	Apr. '98	C/P extraordinary	
AV-1	Germany	Video	Apr., '98	Best buy; Reference	
AV-1	UK	Home Cinema Choice	Apr., '98	Home cinema choice award; Winner	
AV-1	UK	Home Entertainment	Apr., '98	★★★★★, Best buy	
AV-1	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Product of the year	
AV-1	UK	WHAT VIDEO & TV	Oct., '98	Best buy	
AV-S7	UK	WHAT HI*FI	Year, '98	Award winner; Highly recommended	
AV-S7	Japan	HiVi	July, '98	Best buy in summer; Winner	
AV-S7	UK	Home Cinema Choice	Oct., '98	Best buy	
• Subwoofers/Speaker Packages					
YST-SW300	Germany	Video	May, '98	1st. position of 6; Test winner	
YST-SW300	UK	WHAT VIDEO & TV	Dec., '98	Best buy	
YST-SW300	UK	WHAT VIDEO & TV	Jan. '99	WHAT VIDEO & TV award '99	
YST-SW150	Germany	Heimkino	Aug., '98	1st. position of 5; Test winner	
• HiFi Components					
AX-592	Australia	Sound & Image	Year '98	Winner; Amplifier of the year	
AX-592	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Special recognition	
AX-592	Germany	Audio	Oct., '98	Good to very good	
CX-2	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Special recognition	
CDX-393	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; special recognition	
CDC-765	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Product of the year	
MDX-793	U.S.	AudioVideo	Sept., '98	Hi-fi grand prix award; Special recognition	
KX-393	UK	WHAT HI*FI	Year, '98	Winner; Highly recommended	
KX-393	UK	WHAT HI*FI	Sept., '98	★★★★★	

Digital Home Theater Amplifier/Processor Specifications

	DSP-A1	DSP-E492
Category	7-channel amplifier	Amplifier/processor for 5-channel system
Type	Integrated	Add-on
Surround Programs	42 programs	8 programs
Tri-Field CINEMA DSP	■	
Duo-Field CINEMA DSP	■	■
Dolby Pro Logic/Enhanced	■	■
DTS Digital Surround	■	
Dolby Digital	■	
Dolby Surround Pro Logic	■	■
6-Channel External Decoder Input Terminals	■	■
Direct DSP Program Access	■	■
On-Screen Display	■	
Speaker Test Mode	■ With display	■
Pre-Main Coupler	Pre-main and center	
Pre Out Terminals	Rear effect and front effect ch	Main, center and rear effect ch
Subwoofer Terminals	Mono/split	Mono x 2
Dual Center Speaker Capability	■	■
Level Controls	Center, rear effect and front effect ch	Center and rear effect ch
Minimum RMS Output Power (8Ω)		
Main Ch (20–20,000 Hz)	110 W x 2 (0.015% THD)	
Center Ch (20–20,000 Hz)	110 W (0.015% THD)	60 W (0.04% THD)
Rear Effect Ch (20–20,000 Hz)	110 W x 2 (0.015% THD)	60 W x 2 (0.04% THD)
Front Effect Ch (1 kHz)	35 W x 2 (0.05% THD)	
High Dynamic Power, Low Impedance Drive	■	■
Dynamic Power/Ch (IHF)	150/240/340 W (8/6/4Ω, main ch)	110/130/150/165 W (8/6/4/2Ω, center ch)
Linear Damping Circuit	■	■
Damping Factor (8Ω, 20–20,000 Hz)	200	200 (1 kHz)
Input Sensitivity/Impedance	Phono 2.5 mV/47kΩ CD 150 mV/47kΩ	150 mV/47kΩ (pre out)
Frequency Response (20–20,000 Hz)	±0.5 dB (CD)	±0.5 dB (center)
Total Harmonic Distortion (20–20,000 Hz)	0.005% (CD to pre out)	0.015% (center, sp out)
Signal-to-Noise Ratio	CD 96 dB Phono 86 dB	95 dB (pre out)
Multiple A/V Inputs	Digital 5 optical, 3 coaxial and AC-3 RF Analog 6 A/V with S-video terminals and 5 audio	3 A/V and 4 audio with tape monitor
Front Panel Aux Input Terminal	With S-video terminal	
A/V Rec Out Selector	■	
Bass Extension Switch	■	
Tone Bypass Switch	■	
Remote Controllable Master Volume Control	Motor-driven with LED	Motor-driven
Banana Plug Compatible Speaker Terminals	All terminals	
Remote Control Unit	Learning-capable	System remote
Dimensions (W x H x D)	Black Finish 435 x 191 x 473 mm; 17-1/8" x 7-1/2" x 18-5/8" Gold Finish 473 x 191 x 473 mm; 18-5/8" x 7-1/2" x 18-5/8"	435 x 126 x 390 mm; 17-1/8" x 5" x 15-5/16"
Weight	Black Finish 23.0 kg; 50 lbs. 11 oz. Gold Finish 25.0 kg; 55 lbs. 2 oz.	8.5 kg; 18 lbs. 12 oz.

- Dolby Digital and Double D are trademarks of Dolby Laboratories Corporation.
- DTS is a trademark of DTS Technology LLC.

Digital Home Theater Receiver Specifications

	RX-V2095	RX-V995	RX-V795
Sound Field Processing Section			
Channels	7 channels	5 channels	5 channels
Surround Programs	36 programs	25 programs	25 programs
Tri-Field CINEMA DSP	■	■	■
Duo-Field CINEMA DSP	■	■	■
Dolby Digital	■	■	■
DTS Digital Surround	■	■	■
Dolby Pro Logic	■	■	■
On-Screen Display	■	■	■
Speaker Test Mode	■ With display	■ With display	■
6-Channel External Decoder Input	■	■	■
Auto Surround Decoder Selection	■	■	■
Auto Priority Input Terminal Selection	■	■	■
Pre Out Terminals	Pre-main coupler, and center, rear and front effect	Main, center and rear effect	Main, center and rear effect
Subwoofer Terminals	■	■	■
Remote Controllable Subwoofer Level	■	■	■
Audio Section			
Minimum RMS Output Power (8 ohms)			
Main Channels (20–20,000 Hz) [THD]	100 W x 2 [0.02%]	100 W x 2 [0.04%]	85 W x 2 [0.04%]
Center Channel (20–20,000 Hz) [THD]	100 W [0.02%]	100 W [0.04%]	85 W [0.04%]
Rear Effect Channels (20–20,000 Hz) [THD]	100 W x 2 [0.02%]	100 W x 2 [0.04%]	85 W x 2 [0.04%]
Front Effect Channels (1 kHz) [THD]	25 W x 2 [0.05%]		
Minimum RMS Output Power (8 ohms), 1kHz			
Main Channels [THD]	130 W x 2 [0.02%]	120 W x 2 [0.04%]	100 W x 2 [0.07%]
Center Channel [THD]	130 W [0.02%]	120 W [0.04%]	100 W [0.07%]
Rear Effect Channels [THD]	130 W x 2 [0.02%]	120 W x 2 [0.02%]	100 W x 2 [0.07%]
Front Effect Channels [THD]	25 W x 2 [0.05%]		
High Dynamic Power, Low Impedance Drive Capability			
Dynamic Power/Ch (Main Ch, 8/6/4/2 ohms)	140/170/220/320 W	130/160/200/240 W	115/140/170/200 W
Linear Damping Circuit			
Damping Factor (8 ohms, 20–20,000 Hz)	200 (speaker A)	160 (speaker A)	80 (speaker A)
Input Sensitivity/Impedance			
CD	150 mV/47 k-ohms	150 mV/47 k-ohms	150 mV/47 k-ohms
Phono	2.5 mV/47 k-ohms	2.5 mV/47 k-ohms	2.5 mV/47 k-ohms
Frequency Response (20–20,000 Hz, CD)			
	±0.5 dB	±0.5 dB	±0.5 dB
Total Harmonic Distortion (20–20,000 Hz)			
CD (Speaker Out, Main)	0.015% (50W/8 ohms)	0.025% (40W/8 ohms)	0.025% (40W/8 ohms)
Phono (Rec Out)	0.01% (3 V)	0.01% (3 V)	0.02% (1 V)
Signal-to-Noise Ratio (IHF-A-Network)			
CD (Input Shorted, Effect Off)	96 dB	96 dB (150 mV, sp out)	96 dB (150 mV, sp out)
Phono (5 mV, Input Shorted, Effect Off)	86 dB	86 dB (rec out)	86 dB (rec out)
Multiple A/V Inputs			
Digital	4 optical & 2 coaxial	4 optical & 2 coaxial	3 optical & 1 coaxial
Analog	5 A/V with S-video & 3 audio	5 A/V with S-video & 3 audio	5 A/V with 2 S-video for VCR/Aux & 3 audio
Convenient "Set Menu"			
■			
A/V Rec Out Selector			
■			
Bass Extension Switch			
■			
Tone Bypass Switch			
■			
Tone Control Characteristics			
Bass	Boost/Cut ±10 dB/50 Hz	±10 dB/50 Hz	±10 dB/50 Hz
	Turnover Frequency 350 Hz	350 Hz	350 Hz
Treble	Boost/Cut ±10 dB/20 kHz	±10 dB/20 kHz	±10 dB/20 kHz
	Turnover Frequency 3.5 kHz	3.5 kHz	3.5 kHz
Sleep Timer			
■			
Video Section			
Video Signal Level	1 Vp-p/75 ohms	1 Vp-p/75 ohms	1 Vp-p/75 ohms
S-Video Signal Level (Y; C)	1 Vp-p/75 ohms; 0.286 Vp-p	1 Vp-p/75 ohms; 0.286 Vp-p	1 Vp-p/75 ohms; 0.286 Vp-p
Video Signal-to-Noise Ratio	50 dB	50 dB	50 dB
Monitor Out Frequency Response	50 Hz–10MHz -3 dB	50 Hz–10MHz -3 dB	50 Hz–10MHz -3 dB
Outstanding Tuner Performance			
40-Station Preset Tuning			
■			
Auto FM Station Memory and Preset Editing			
■			
Direct PLL IF Count Synthesizer Tuning			
■			
FM 50 dB Quieting Sensitivity (IHF, 75 ohms)	Mono 1.6 μV (15.3 dBf) Stereo 23 μV (38.5 dBf)	1.6 μV (15.3 dBf) 23 μV (38.5 dBf)	1.6 μV (15.3 dBf) 23 μV (38.5 dBf)
FM Alternate Channel Selectivity (IHF)	75 dB	75 dB	75 dB
FM Signal-to-Noise Ratio (Mono/Stereo)	81 dB/75 dB	81 dB/75 dB	81 dB/75 dB
FM Harmonic Distortion (Mono/Stereo, 1 kHz)	0.1%/0.2%	0.1%/0.2%	0.1%/0.2%
FM Frequency Response (20–15,000 Hz)	±1 dB	±1 dB	±1 dB
AM Usable Sensitivity; Signal-to-Noise Ratio	300 μV/m; 52 dB	300 μV/m; 52 dB	300 μV/m; 52 dB
General			
I/O Port			
■			
Banana Plug Compatible Speaker Terminals			
All terminals			
Remote Control Unit			
Learning-capable & system remote unit			
Learning-capable			
Universal-type			
Dimensions			
Width	435 mm; 17-1/8"	435 mm; 17-1/8"	435 mm; 17-1/8"
Height	171 mm; 6-3/4"	171 mm; 6-3/4"	151 mm; 5-15/16"
Depth	470 mm; 18-3/4"	391 mm; 15-3/4"	391 mm; 15-3/4"
Weight			
20.0 kg; 44 lbs. 1 oz.			
13.8 kg; 30 lbs. 7 oz.			
13.0 kg; 28 lbs. 10 oz.			

	RX-V595	RX-V495	RX-V395
Sound Field Processing Section			
Channels	5 channels	5 channels	5 channels
Surround Program	11 programs	11 programs	8 programs
Tri-Field CINEMA DSP	■	■	
Duo-Field CINEMA DSP	■	■	■
Dolby Pro Logic/Enhanced	■	■	■
Dolby Digital	■	■	
Dolby Pro Logic	■	■	■
On-Screen Display	■		
Speaker Test Mode	■	■	■
6-Channel External Decoder Input	■	■	■
Subwoofer Output Terminal	■	■	■
Remote Controllable Subwoofer Level	■	■	■
Convenient "Set Menu"	■	■	
Digital Delay Time Control	■	■	■
Center and Rear Effect Level Controls	■	■	■
Audio Section			
Minimum RMS Output Power (8 ohms)			
Main Channels (20–20,000 Hz) [THD]	70 W x 2 [0.04%]	60 W x 2 [0.04%]	60 W x 2 [0.04%]
Center Channel (20–20,000 Hz) [THD]	70 W [0.04%]	60 W [0.04%]	60 W [0.04%]
Rear Effect Channels (20–20,000 Hz) [THD]	70 W x 2 [0.04%]	60 W x 2 [0.04%]	60 W x 2 [0.04%]
Minimum RMS Output Power (8 ohms, 1kHz)			
Main Channels [THD]	85 W x 2 [0.07%]	70 W x 2 [0.07%]	70 W x 2 [0.07%]
Center Channel [THD]	85 W [0.07%]	70 W [0.07%]	70 W [0.07%]
Rear Effect Channels [THD]	85 W x 2 [0.07%]	70 W x 2 [0.07%]	70 W x 2 [0.07%]
High Dynamic Power, Low Impedance Drive Capability	■	■	■
Dynamic Power/Ch (Main Ch, 8/6/4/2 ohms)	100/120/145/170 W	80/100/120/145 W	80/100/120/145 W
Linear Damping Circuit	■	■	■
Damping Factor (8 ohms, 20–20,000 Hz)	60 (speaker A)	60 (speaker A)	60 (speaker A)
Input Sensitivity/Impedance			
CD	150 mV/47 k-ohms	150 mV/47 k-ohms	150 mV/47 k-ohms
Phono	2.5 mV/47 k-ohms	2.5 mV/47 k-ohms	2.5 mV/47 k-ohms
Frequency Response (20–20,000 Hz, CD)	±0.5 dB	±0.5 dB	±0.5 dB
Total Harmonic Distortion (20–20,000 Hz, 1 V)			
Phono (Rec Out)	0.02%	0.02%	0.02%
Signal-to-Noise Ratio (IHF-A-Network)			
CD (Input Shorted, Effect Off)	96 dB (150 mV, sp out)	96 dB	96 dB
Phono (5 mV, Input Shorted, Effect Off)	86 dB (rec out)	86 dB	86 dB
Multiple A/V Inputs			
Digital	2 optical & 1 coaxial	2 optical & 1 coaxial	
Analog	4 A/V & 3 audio	4 A/V & 3 audio	3 A/V & 3 audio
Remote Controllable Master Volume Control	■ Motor-driven	■ Motor-driven	■ Motor-driven
Tone Control Characteristics			
Bass			
Boost/Cut	±10 dB/50 Hz	±10 dB/50 Hz	±10 dB/50 Hz
Turnover Frequency	350 Hz	350 Hz	350 Hz
Treble			
Boost/Cut	±10 dB/20 kHz	±10 dB/20 kHz	±10 dB/20 kHz
Turnover Frequency	3.5 kHz	3.5 kHz	3.5 kHz
Sleep Timer	■	■	■
Video Section			
Video Signal Level	1 Vp-p/75 ohms	1 Vp-p/75 ohms	1 Vp-p/75 ohms
Video Signal-to-Noise Ratio	50 dB	50 dB	50 dB
Monitor Out Frequency Response	5 Hz–10MHz -3 dB	5 Hz–10MHz -3 dB	5 Hz–10MHz -3 dB
Outstanding Tuner Performance			
40-Station Preset Tuning	■	■	■
Auto FM Station Memory and Preset Editing	■	■	■
Multi-Status Station Memory	■	■	■
Direct PLL IF Count Synthesizer Tuning	■	■	■
FM 50 dB Quieting Sensitivity			
(IHF, 75 ohms)			
Mono	1.6 μV (15.3 dBf)	1.6 μV (15.3 dBf)	1.6 μV (15.3 dBf)
Stereo	23 μV (38.5 dBf)	23 μV (38.5 dBf)	23 μV (38.5 dBf)
FM Alternate Channel Selectivity (IHF)	75 dB	75 dB	75 dB
FM Signal-to-Noise Ratio (Mono/Stereo)	81 dB/75 dB	81 dB/75 dB	81 dB/75 dB
FM Harmonic Distortion (Mono/Stereo, 1 kHz)	0.1%/0.2%	0.1%/0.2%	0.1%/0.2%
FM Frequency Response (20–15,000 Hz)	±1 dB	±1 dB	±1 dB
AM Usable Sensitivity	300 μV/m	300 μV/m	300 μV/m
AM Signal-to-Noise Ratio	52 dB	52 dB	52 dB
General			
Banana Plug Compatible Speaker Terminals	Main ch	Main ch	Main ch
Remote Control Unit	Universal-type	Universal-type	Universal-type
Dimensions			
Width	435 mm; 17-1/8"	435 mm; 17-1/8"	435 mm; 17-1/8"
Height	151 mm; 5-15/16"	151 mm; 5-15/16"	151 mm; 5-15/16"
Depth	391 mm; 15-3/4"	391 mm; 15-3/4"	391 mm; 15-3/4"
Weight	12.4 kg 27 lbs. 5 oz. 24 lbs. 4 oz.	11.2 kg 24 lbs. 11 oz.	10.5 kg 23 lbs. 2 oz.

High-Performance Speaker Systems Specifically Designed for Digital Home Theater Use.

The speakers you use for your home theater system will play an important role in determining its sound quality, and must be chosen with care. Because main and center speakers will be reproducing the dialogue and effects that make the real difference in a home theater system, they must be very high quality. Subwoofers are also important for achieving optimum overall response and quality, especially in listening rooms with an abundance of sound-absorbing materials, where extra sharp, powerful bass is necessary to achieve realistic cinematic sound.

Subwoofer
Because good bass response is necessary for enjoying movie sound, Yamaha YST subwoofers are ideal for use in digital home theater systems.

Amplifiers/Receivers
Yamaha's powerful multi-channel Digital Home Theater Amplifiers/Receivers can decode Dolby Digital and DTS Digital Surround signals, and have extraordinary Digital Sound Field Processing capabilities.

Center Speaker
The center speaker delivers most of the dialogue, so high clarity output is vital to movie enjoyment.



Rear Effect Speakers
Ideally, these speakers should be the same as the main speakers. However compact, high quality speakers can also be used, especially necessary when reproducing Dolby Digital or DTS Digital Surround movies.

Main Speakers
Yamaha A/V speakers provide outstanding imaging, frequency response and dynamic range for handling dialogue, music and sound effects.

7-Channel System

If you use a 7-channel amp or receiver, you can add two front effect speakers for even more dynamic and realistic sound staging.

The Importance of a Subwoofer

The subwoofer is a vitally important component in home theater systems. Low-frequency sounds, such as explosions, rumblings and scary music, add a lot to movie atmosphere, so full audio enjoyment requires deep, clear bass response. This is even truer with 5.1-channel sound, because the sixth channel is the Low Frequency Effect channel. In addition, without a subwoofer, you'll lose much of the bass effect at low volume levels.



YST-SW160

Advanced Yamaha
Active Servo Processing
Subwoofer



YST-SW90

Advanced Yamaha
Active Servo Processing
Subwoofer



YST-SW45

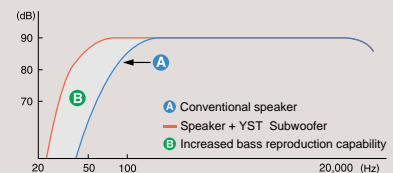
Advanced Yamaha
Active Servo Processing
Subwoofer



Yamaha subwoofers are designed for maximum effectiveness in home theater systems. They are compact, yet deliver exceptionally powerful and accurate bass response. This is made possible by Yamaha Active

Servo Technology (YST), in which the speaker and amplifier work together to cancel out impedance so the speaker unit has a perfectly linear motion. The newest Yamaha subwoofers have an Advanced YST (A-YST) design that provides even higher levels of sound pressure and overall performance.

To fully optimize bass performance in a high-end system, two subwoofers are recommended.



Subwoofers	YST-SW160	YST-SW90	YST-SW45
YST (Yamaha Active Servo Technology)	Yes (Advanced YST)	Yes (Advanced YST)	Yes (Advanced YST)
Drivers	Dual 20 cm (8") multi-range	20 cm (8") multi-range	20 cm (8") multi-range
Magnetic Shielding	Yes	Yes	Yes
High Cut Filter	40—140 Hz continuously variable	50—150 Hz continuously variable	50—150 Hz continuously variable
Phase Control	Yes	Yes	Yes
Auto Standby	Yes	Yes	Yes
BASS (Bass Action Selector System)	Yes	Yes	Yes
Two Input Connections (Speaker or Line Level)	Yes	Yes	Yes
Speaker Terminal	Banana-plug compatible	Banana-plug compatible	Banana-plug compatible
MDF Cabinet	Yes	Yes	Yes
Output Power (5 ohms)	150 W	100 W	70 W
Frequency Response	20—160 Hz (-10 dB)	23—170 Hz (-10 dB)	30—200 Hz (-10 dB)
Dimensions (W x H x D)	235 x 602 x 463 mm 9-1/4" x 23-11/16" x 18-1/4"	235 x 485 x 409 mm 9-1/4" x 19-1/8" x 16-1/8"	235 x 365 x 318 mm 9-1/4" x 14-3/8" x 12-1/2"
Weight	20.0 kg; 44 lbs. 1 oz.	14.0 kg; 30 lbs. 14 oz.	9.0 kg; 19 lbs. 13 oz.

Digital Home Theater Speakers



NS-A1738
3-Way 4-Speaker Passive Narrow Tower Speaker System



NS-A1638
3-Way 4-Speaker Passive Narrow Tower Speaker System

	NS-A1738	NS-A1638
Bass-Reflex & Multi-Chambered Design	Yes	Yes
Mirror Imaged Side Firing Long Throw	38cm (15") polymer coated	30cm (12") polymer coated
Woofer (Pair Packed Labeled Left & Right)	Glass Filled Hi-Polymer Coated High Compliance Cloth Midrange	Dual 13.5cm (5-1/4") with inverted dust cover
Glass Filled Cloth Dome Tweeter	2.5 cm (1")	2.5 cm (1")
Input Power (Music/Nominal)	240 W/120 W	200 W/100 W
Frequency Response	30—20,000 Hz	35—20,000 Hz
Impedance	6 ohms	6 ohms
Magnetic Shielding	Yes	Yes
New Grille Design	With satin cloth	With satin cloth
New Micro-Pebble Black Finish	Yes	Yes
Dimensions (W x H x D)	205 x 997 x 489 mm	179 x 927 x 433 mm
	8-1/16" x 39-1/4" x 19-1/4"	7-1/16" x 36-1/2" x 17-1/16"
Weight	25.7 kg; 56 lbs. 8 oz.	21.1 kg; 46 lbs. 8 oz.



NS-A638
3-Way Bookshelf Speaker System



NS-A528
2-Way Bookshelf Speaker System

	NS-A638	NS-A528
Acoustic Suspension Design	Yes	Yes
Hi-Polymer Coated Woofer with New Inverted or Rubber Dust Cover	20cm (8") cone	15cm (6") cone
Midrange with New Inverted or Rubber Dust Cover	10cm (4") cone	
Ferro-Fluid Cooled Dome Tweeter	2cm (3/4") with new faceplate design	2cm (3/4") with new faceplate design
Input Power (Music/Nominal)	140 W/70 W	60 W/30 W
Frequency Response	90—20,000 Hz	95—20,000 Hz
Impedance	8 ohms	8 ohms
Magnetic Shielding	Yes	Yes
New Grille Design	With satin cloth	With satin cloth
New Micro-Pebble Black Finish	Yes	Yes
Dimensions (W x H x D)	267 x 421 x 330 mm	203 x 305 x 245 mm
	10-1/2" x 16-3/16" x 25-1/16"	8" x 12" x 9-5/8"
Weight	6.5 kg; 14 lbs. 6 oz.	3.5 kg; 7 lbs. 12 oz.



NS-AC143
Center Channel Speaker System



NS-E103
Effect Channel Speaker System

	NS-AC143	NS-AW1/NS-AW1W
Type	2-way 3-speaker acoustic suspension? design for center channel use	2-way acoustic suspension bookshelf design for indoor/outdoor use
Glass Filled Hi-Polymer Coated High Compliance Cloth Woofer	Dual 13.5cm (5-1/4") with inverted dust cover	13cm (5")
Tweeter	2.5cm (1") glass filled cloth dome	1.3cm (1/2") pure titanium balanced dome ferro-fluid cooled
Input Power (Music/Nominal)	160 W/80 W	120 W/60 W
Frequency Response	80—20,000 Hz	55—22,000 Hz ±3 dB
Tweeter Attenuator	Yes	
Impedance	8 ohms	6 ohms
Magnetic Shielding	Yes	Yes
New Grille Design	With satin cloth	With satin cloth
New Micro-Pebble Black Finish	Yes	Yes
Dimensions (W x H x D)	484 x 165 x 172 mm	149 x 246 x 140 mm
	19-1/16" x 6-1/2" x 6-3/4"	5-7/8" x 8-1/2" x 5-1/2"
Weight	5.2 kg; 11 lbs. 8 oz.	1.8 kg; 4 lbs.



NS-AW1
All Weather Speaker System Black Finish Version



NS-AW1W
All Weather Speaker System White Finish Version

	NS-E103
Type	Full-range bass-reflex design
Wall-Mounting or Self-Standing	Yes (supplied speaker stands)
Driver	10cm (4") cone full-range
Magnetic Shielding	Yes
Input Power (Maximum/Nominal)	80 W/25 W
Frequency Response	70—20,000 Hz
Impedance	6 ohms
Sound Pressure Level	90 dB/W/m
Dimensions (W x H x D)	180 x 220 x 101 mm; 7-1/8" x 8-11/16" x 4"
Weight	1.5 kg; 3 lbs. 5 oz.



YHT-22
Digital Home Theater
Package



YHT-16
Digital Home Theater
Package



NS-AP150
3-Piece Center/Effect Speaker Package



NS-AP101
3-Piece Center/Effect Speaker Package

	YHT-22 (HTR-5140)	YHT-16 (R-V703)
Digital Home Theater Receivers		
Surround Programs	11 programs	8 programs
Tri-Field CINEMA DSP Program	Yes	
Dolby Digital Decoder	Yes	
CINEMA DSP Programs	6 programs	2 programs
Dolby Pro Logic Decoder	Yes	Yes
HiFi DSP Programs	3 programs	5 programs
Min. RMS Output Power (8Ω, 20—20,000 Hz, 0.04% THD)		
Main Channels	60 W x 2	70 W x 2
Center Channel	60 W	70 W
Rear Effect Channels	60 W x 2	20 W x 2

Min. RMS Output Power (8Ω, 1 kHz)		
Main Channels	70 W x 2 (0.07% THD)	80 W x 2 (0.09% THD)
Center Channel	70 W (0.07% THD)	80 W (0.09% THD)
Rear Effect Channels	70 W x 2 (0.07% THD)	20 W x 2 (0.09% THD)

Universal Remote Control Unit	Yes	Yes
Dimensions (W x H x D)	435 x 151 x 391 mm	435 x 151 x 309 mm
	17-1/8" x 5-15/16" x 15-3/8"	17-1/8" x 5-15/16" x 12-3/16"

Weight	11.2 kg; 24 lbs. 11 oz.	8.7 kg; 19 lbs. 3 oz.
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Main/Effect Speakers (x 4)	(NS-AP327)	(NS-AP16)
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Type	2-way acoustic suspension design	2-way acoustic suspension design
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Woofers	9 cm (3-1/2") polymere coated	13cm (5") cone
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Tweeter	1.9 cm (3/4") mylar dome	2cm (3/4") dome
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Magnetic Shielding	Yes	Yes
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Input Power (Music/Nominal)	120 W/60 W	80 W/40 W
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Dimensions (W x H x D)/Unit	111 x 198 x 102 mm	141 x 213 x 146 mm
	4-3/8" x 7-13/16" x 4"	5-9/16" x 8-3/8" x 5-3/4"

Weight (Unit)	1.6 kg; 3 lbs. 10 oz.	1.9 kg; 4 lbs. 2 oz.
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Center Speaker	(NS-AP327)	(NS-AP16)
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Type	2-way acoustic suspension design	2-way acoustic suspension design
------	----------------------------------	----------------------------------

Woofers	9 cm (3-1/2") polymere coated	13cm (5") cone
---------	----------------------------------	----------------

Tweeters	Dual 1.9 cm (3/4") mylar dome	5cm (2") cone
----------	----------------------------------	---------------

Magnetic Shielding	Yes	Yes
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Input Power (Music/Nominal)	120 W/60 W	80 W/40 W
-----------------------------	------------	-----------

Dimensions (W x H x D)/Unit	111 x 198 x 102 mm	141 x 213 x 146 mm
	10-3/4" x 4-3/4" x 3-3/4"	5-9/16" x 8-3/8" x 5-3/4"

Weight (Unit)	1.6 kg; 3 lbs. 10 oz.	1.9 kg; 4 lbs. 2 oz.
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Subwoofer	(YST-SW45)	(YST-SW45)
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Type	Advanced YST	Advanced YST
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Magnetic Shielding	Yes	Yes
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Adjustable High Cut Filter (Continuously Variable)	50—150 Hz	50—150 Hz
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Output Power (5 ohms)	70 W	70 W
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Frequency Response	30—200 Hz (-10 dB)	30—200 Hz (-10 dB)
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Dimensions (W x H x D)	235 x 365 x 318 mm	235 x 365 x 318 mm
	9-1/4" x 14-3/8" x 12-1/2"	9-1/4" x 14-3/8" x 12-1/2"

Weight	9.0 kg; 19 lbs. 13 oz.	9.0 kg; 19 lbs. 13 oz.
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	NS-AP150	NS-AP101
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Center Speaker	(NS-AC3)	(NS-AC2A)
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Type	2-way acoustic suspension design	2-way acoustic suspension design
------	----------------------------------	----------------------------------

Woofers	Dual 13cm (5")	Dual 13cm (5") cone
---------	----------------	---------------------

Tweeter	2cm (3/4") dome	5cm (2") cone
---------	-----------------	---------------

Magnetic Shielding	Yes	Yes
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Input Power (Music/Nominal)	100 W/50 W	60 W/5 W (max/min)
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Frequency Response	80—20,000 Hz	70—20,000 Hz
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Effect Speakers	(NS-A770)	(NS-A76A)
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Drivers	13cm (5") woofer and 2cm (3/4") ferro- fluid cooled dome tweeter	13cm (5") full range driver
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Input Power (Music/Nominal)	100 W/50 W	60 W/5 W (max/min)
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Frequency Response	90—20,000 Hz	95—13,000 Hz
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Package Dimensions (W x H x D)	546 x 552 x 305 mm	527 x 381 x 203 mm
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	21-1/2" x 21-3/4" x 12"	20-3/4" x 15" x 8"
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Carton Weight	12.2 kg; 27 lbs.	5.9 kg; 13 lbs.
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A Receiver that Treats Your Music with Respect



RX-770 AM/FM Stereo Receiver

ToP-ART

This is an amplifier/tuner combination whose sound quality leaves nothing to be desired. High power and connection flexibility make it an extremely attractive choice.

ToP-ART Construction

- Pure Direct Switch
- Twin Heavy-Duty Aluminum-Extruded Heat Sinks
- Thick PC Board Wiring

Excellent Sound Quality

- High Dynamic Power and Low-Impedance Drive Capability
- 2-Way Binding-Post Speaker Terminals (Banana Plug/Cable)
- Remote Controllable Loudness Control (Continuously Variable)
- Rec Out Selector
- Pre-Main Coupler
- Remote Controllable Motor-Driven Input Selector and Volume

Control with LED

- Sleep Timer
- I/O Port for Custom Installation

High Precision Tuning

- 40-Station AM/FM Random Access Preset Tuning
- Multi-Status Station Memory
- *Not available in some areas*



High Output Power with Impressive Sound Quality



RX-596 AM/FM Stereo Receiver

CD Direct Amplification

ToP-ART

Featuring the new CD Direct Amplification circuit and other top Yamaha technologies, this receiver will give you years of fully satisfying listening enjoyment.

ToP-ART Construction

- Pure Direct Switch
- Twin Heavy-Duty Aluminum-Extruded Heat Sinks
- Anti-Vibration, Anti-Resonance

Chassis with ART Base

Excellent Sound Quality

- CD Direct Amplification Circuit with Switch
- Remote Controllable Motor-Driven Input Selector and Volume Control
- Rec Out Selector
- 2-Way Binding-Post Speaker Terminals (Banana Plug/Cable)
- I/O Port for Custom Installation
- Sleep Timer

High Precision Tuning

- 40-Station Random Access Preset Tuning
- Auto FM Station Memory and Preset Editing
- Direct PLL IF Count Synthesizer
- Multi-Status Station Memory





Impressive Power and Versatility



RX-496 AM/FM Stereo Receiver

The RX-496 delivers an impressive 75W of RMS power with no audible distortion. With a superb tuner section and full remote control convenience, this is a receiver that will provide complete satisfaction in any system.

Total System Control Capability

- Full-Function Remote Unit
- Yamaha System Remote Control Capability
- Two Switched AC Outlets for

Convenient Connection

- Remote Controllable Motor-Driven Volume Control
- Sleep Timer

Excellent Sound Quality

- Pure Direct Switch for Short and Direct Signal Path
- Linear Damping Circuit
- High Dynamic Power and Low-Impedance Drive Capability
- Continuously Variable Loudness Control

I/O Port for Custom Installation

- **High Precision Tuning**
- 40-Station AM/FM Random Access Preset Tuning
- Auto FM Station Memory and Preset Editing
- Direct PLL IF Count Synthesizer Tuning
- Multi-Status Station Memory



Full Yamaha Quality and Convenience



RX-396 AM/FM Stereo Receiver

Handy operation combines with flexible control, making this receiver a unanimous "best buy" selection.

Total System Control Capability

- Full-Function Remote Unit
- Yamaha System Remote Control Capability
- 3 Audio Inputs with 1 Tape Monitor
- Two Switched AC Outlets for

Convenient Connection

- Remote Controllable Motor-Driven Volume Control
- Remote Controllable Direct Access Input Selector
- Sleep Timer

Excellent Sound Quality

- Linear Damping Circuit
- High Dynamic Power and Low-Impedance Drive Capability
- Continuously Variable Loudness

Control

- I/O Port for Custom Installation
- **High Precision Tuning**
- 40-Station AM/FM Random Access Presets
- Auto FM Station Memory and Preset Editing
- Multi-Status Station Memory





The Advantage Is Signal Purity



AX-592 Integrated Stereo Amplifier

CD Direct Amplification ToP-ART

The AX-592 provides the assurance of maximum signal purity with ToP-ART design, advanced circuitry, 100W of RMS power, and other high-end features.

ToP-ART Construction

- I/O Direct Symmetrical Design
- Pure Direct Switch

- Twin Extra-Large, Heavy-Duty Aluminum-Extruded Heat Sinks
- **Excellent Sound Quality**
- CD Direct Amplification Circuit
- Linear Damping Circuit
- High Dynamic Power and Low-Impedance Drive Capability
- Phono MC/MM Selector

Superior Operation Control

- Continuously Variable Loudness Control
- Rec Out Selector
- Pre-Main Coupler
- Remote Controllable Motor-Driven Input Selector and Volume Control with Indicator



Dependable Reception, Extra Convenience



TX-492 AM/FM Stereo Tuner

Upgraded Tuning Convenience

- 40-Station "Instant Access" AM/FM Random Access Preset
- Auto FM Station Memory and Preset Editing: A brand new Yamaha feature, Auto FM Station Memory automatically presets the 40

strongest FM stations on the dial so you don't have to do it manually. You can then use Preset Editing to arrange AM and FM stations in groups as you wish.

- 3-Way Multi-Status Station
- Auto Search and Manual Up/Down

Tuning

Excellent Sound Quality

- Direct PLL IF Count Synthesizer Tuning
- 6-Segment Signal Quality Meter
- Yamaha System Remote Control Compatibility

AM/FM Stereo Receiver Specifications

		RX-770	RX-596	RX-496	RX-396
Total System Control					
Multiple A/V Inputs		2 A/V & 3 audio	2 A/V & 3 audio	3 audio with 2 tape positions	3 audio with tape position
Remote Controllable Input Selector		■ Motor-driven	■ Motor-driven	■	■
Remote Controllable Volume Control		■ Motor-driven (LED)	■ Motor-driven	■ Motor-driven	■ Motor-driven
Rec Out Selector		■ 6 selections	■ 6 selections		
ToP-ART					
● I/O Direct Symmetrical Design		■	■		
● Pure Direct Switch		■		■	
● High Quality Parts		■	■	■	■
● Heavy-Duty Heat Sinks		Aluminum-extruded (twin)	Aluminum-extruded (twin)	Aluminum-extruded (single)	
● Thick PC Board Wiring		■	■	■	■
● AntiVibration, Anti-Resonance Chassis		■	■		
Tough Construction ART Base		■	■		
Frequency Response (20–20,000 Hz)		±0.5 dB	±0.5 dB	±0.5 dB	±0.5 dB
Total Harmonic Distortion	Phono MM	0.003%	0.003%	0.02%	0.02%
	CD	0.008%	0.008%	0.02%	0.02%
Signal-to-Noise Ratio	CD	110 dB (pure direct on)	110 dB (pure direct on)	108 dB (input shorted)	108 dB (input shorted)
	Phono	88 dB (5 mV input shorted)	88 dB (5 mV input shorted)	82 dB (5 mV input shorted)	82 dB (5 mV input shorted)
High Dynamic Power, Low-Impedance Drive					
Minimum RMS Output Power/Ch (8Ω, 20–20,000 Hz)					
		85 W x 2 (0.019% THD)	80 W x 2 (0.025% THD)	75 W x 2 (0.04% THD)	50 W x 2 (0.04% THD)
Dynamic Power/Ch (8/6/4/2Ω)		130/150/185/220 W	120/140/180/200 W	105/125/150/178 W	70/77/89/100 W
Linear Damping		■	■	■	■
Damping Factor (8Ω, 20–20,000 Hz)		240	240	100	100
Continuously Variable Loudness Control		■ Remote controllable	■	■	■
Pre-Main Coupler		■			
Banana Plug Compatible Speaker Terminals		■	■	■	■
Sleep Timer		■	■	■	■
Outstanding Tuner Performance					
40-Station Preset Tuning		■	■	■	■
Auto FM Station Memory and Preset Editing		■	■	■	■
Direct PLL IF Count Synthesizer Tuning		■	■	■	■
High FM Reception Capability		■	■	■	■
50 dB Quieting Sensitivity	Mono	1.55 μV (15.1 dBf)	1.55 μV (15.1 dBf)	1.55 μV (15.1 dBf)	1.55 μV (15.1 dBf)
	Stereo	21 μV (37.7 dBf)	21 μV (37.7 dBf)	21 μV (37.7 dBf)	21 μV (37.7 dBf)
Alternate Channel Selectivity (IHF)		85 dB	85 dB	85 dB	85 dB
Signal-to-Noise Ratio (Mono/Stereo)		81 dB/76 dB	80 dB/75 dB	80 dB/75 dB	80 dB/75 dB
Harmonic Distortion (Mono/Stereo, 1 kHz)		0.1%/0.2%	0.1%/0.2%	0.1%/0.2%	0.1%/0.2%
Frequency Response (20–15,000 Hz)		±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB
High AM Reception Capability					
Usable Sensitivity; Selectivity		100 μV/m; 32 dB	100 μV/m; 32 dB	100 μV/m; 32 dB	100 μV/m; 32 dB
I/O Port for Custom Installation		■	■	■	■
Dimensions	Width	435 mm; 17-1/8"	435 mm; 17-1/8"	435 mm; 17-1/8"	435 mm; 17-1/8"
	Height	150 mm; 5-7/8"	151 mm; 5-15/16"	146 mm; 5-3/4"	146 mm; 5-3/4"
	Depth	389 mm; 15-5/16"	390 mm; 15-7/16"	309 mm; 12-1/8"	309 mm; 12-1/8"
Weight		10.0 kg; 22 lbs.1 oz.	9.5 kg; 20 lbs. 15 oz.	8.2 kg; 18 lbs. 1 oz.	6.4 kg; 14 lbs. 2 oz.

Integrated Amplifier/Tuner Specifications

	AX-592	TX-492
High Dynamic Power, Low-Impedance Drive Capability		
Min. RMS Output Power/Ch (8Ω, 20–20,000 Hz)	100 W (0.015% THD)	
Dynamic Power/Ch (8/6/4/2Ω)	140/170/220/290 W	
Frequency Response (20–20,000 Hz)	±0.5 dB	
THD (20–20,000 Hz, Phono MM/CD)	0.003%/0.008%	
Signal-to-Noise (CD/Phono MM)	110 dB/92 dB	
Linear Damping	■	
Damping Factor (8Ω, 20–20,000 Hz)	320	
Remote Controllable Input Selector	Motor-driven with LED	
Remote Controllable Volume Control	Motor-driven with LED	
Input Sensitivity/Impedance	Phono MM 2.5 mV/47kΩ Phono MC 160 μV/250Ω CD 150 mV/47kΩ	
Rec Out Selector	■	
Yamaha System Remote Control Capability	■	
Dimensions (W x H x D)	435 x 151 x 396 mm 17-1/8" x 5-15/16"	435 x 86 x 278 mm 17-1/8" x 3-3/8" x 11"
Weight	10.6 kg; 23 lbs. 6 oz.	3.2 kg 7 lbs. 1 oz.
Product designs and specifications are subject to change without notice.		

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